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Institutionen för kvinnor och barns hälsa
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Skin-to-Skin Contact

Knowledge and practical experience at a Community Clinic in Kenya

Hud-mot-Hud Kontakt

Kunskap och praktiska erfarenheter på en Community Clinic i Kenya

Examensarbete i sexuell, reproduktiv och perinatal hälsa, 15 hp
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Abstract

The neonatal period is a vulnerable time for an infant and approximately 40 percent of all deaths in infants occur during this time. Africa has the slowest reduction of neonatal deaths globally. Skin-to-skin contact (SSC) is a simple and cost-effective strategy to meet the newborns need for warmth, protection from infection, hypothermia, hypoglycemia as well as facilitating the initiation of breastfeeding. The aim for this study was to investigate healthcare professionals' theoretical and practical knowledge and experience of skin-to-skin contact as well as perceived barriers and challenges (if any) to practicing it at a community clinic in Kenya. Method used was participant observation and semi-structured interviews with healthcare professionals. Interviews has been analyzed with content analysis and complemented with field notes to add a deeper meaning. Five categories emerged; theoretical knowledge, practical experience, healthcare professionals attitude towards SSC, maternal attitude towards SSC and limited time due to high workload. Findings show that health care professionals have theoretical knowledge but little practical experience. High workload, lack of time, space and adequate number of staff were reported barriers for implementing it in practice. Disbelief in the benefits of SSC, negative attitudes among healthcare professionals and mothers' were also mentioned challenges.

Key words: *Skin-to-skin contact, neonatal mortality, Kenya, theoretical knowledge, practical experience*

CONTENTS

INTRODUCTION.....	1
BACKGROUND.....	2
Millennium Development Goals (MDG).....	2
Kenya.....	3
Gender inequality	4
Maternity, women's and infants' health risks in Kenya	4
Baby Friendly Hospital Initiative (BFHI)	5
Skin-to-Skin Contact (SSC)	6
STATEMENT OF PROBLEM.....	9
AIM.....	9
METHOD	10
Setting	10
Data collection.....	12
Participants	13
Ethical considerations	13
Analysis.....	14
FINDINGS	15
Categories	15
Theoretical knowledge.....	15
Practical experience	17
Healthcare professionals attitude towards SSC	19
Maternal attitude towards SSC	19
Limited time due to high workload and inadequate staffing.....	20
DISCUSSION.....	21
Limitations and other methodological concerns	26
Further research	27
Conclusion and implications.....	27
REFERENCES	29
APPENDIX 1.....	33

INTRODUCTION

January 18, 2011

It is early morning at a community clinic in the coastal region of Kenya. I stand with a perfect little newborn girl in my arms. I have just experienced my first delivery at the community clinic where I had arrived a week earlier to volunteer as a registered nurse. The little baby was crying for a little while but is now silent and resting peacefully in my arms. She is beautiful, light brown skin, brown eyes and a round little mouth. Slowly she begins to open her eyes and move her head from left to right, opens and closes her mouth and slowly moves her little hand towards her mouth. She makes little noises and suddenly she starts to cry again. I hold her closer in my arms, rocking her and start singing a Swedish lullaby. After a little while she falls asleep. It was a normal delivery and her mother is in the shower, she has only seen her new little girl for a minute or two before we took the baby away to dry, weigh and wrap her in two new, beautiful traditional pieces of Kenyan fabric called kangas.

During my time at the clinic I assisted in numerous births. Most of them went well and both mother and child could leave the clinic within 24 hours of delivery. All the routines around the deliveries were pretty much the same and the baby was always quickly dried, weighed and wrapped in two kangas, and put to the side or held by a member of the staff or a relative after birth. I knew we used to place the baby on the mothers' chest in Sweden after delivery, but as I did not have much practical experience of that as a nurse I didn't think much about it and was happily standing by the side holding the newborn baby in my arms.

Later, during my midwifery studies, I learned about the positive effects of skin-to-skin contact for both mother and child. I was a bit surprised that the babies at the clinic were not placed skin-to-skin with the mother as it seemed so natural and logical, especially in a setting with vulnerable babies and limited resources. Why wasn't it done? I decided to go back once more to investigate the issue regarding this phenomena at this particular community clinic in Kenya.

BACKGROUND

In January 2011 I went to Kenya for the first time to work as a volunteer nurse at a community clinic located in the coastal region south of Mombasa. This was to be the first of three visits. During my time there I lived in a room at the staff quarters and spent most of my time, both on and off work, with the staff. I was invited to do rotation at the different wards at the clinic in order to get a better understanding of how the clinic operated. I spent different days immunizing children, at the antenatal and delivery ward, laboratory, pharmacy as well as the so called injection room. Aside from this, I also participated in the HIV- programs and educational programs at the local school. I went out with the staff to the nearby villages at so- called outreach programs to find HIV patients who had not met up for scheduled consultations and medical appointments. This gave me an opportunity to better understand not only the organization of the clinic but also how and under what conditions the healthcare staff were performing their duties. The clinic opened in the fall of 2009 and had quickly established itself as a clinic with a high quality of care as well as being renowned for its compassionate staff. A good reputation, as well as a shortage of medical services in the area, has resulted in a constant increase of numbers of patients seeking care at the clinic. In the spring of 2011, a collaboration with local traditional birth attendants (TBAs) was initiated and, in a few months, the number of deliveries had more than doubled and numbers of women coming to the clinic to give birth increase every month.

Millennium Development Goals (MDG)

According to the Millennium Development Goals Report of 2013 (United Nations, 2013), significant progress has been made globally in a number of areas such as poverty reduction, access to drinking water and reduction of cases of malaria and tuberculosis just to mention a few. However, in the area of maternal health as well as child mortality, MDG 4 and 5, much is still needed to be done. Even though the risk of children dying before the age of five has decreased, the proportion of children dying in the neonatal period has increased, and Africa has the slowest reduction of neonatal deaths globally (Oestergaard et al., 2011).

Access to skilled health personnel, as well as antenatal and postnatal care programs is still limited in many poor regions and women and children's health issues are not just discussed as a question of health, but also as a political issue to focus on the matter of gender equality. Many times, small and uncomplicated changes and actions can make a big change. According to the International Confederation of Midwives (2013) , the Millennium Development Goals where midwives and midwifery makes the most important contribution are 4) reduce child mortality, 5) improve maternal health and number 6) combat HIV/AIDS, malaria and other disease. Preterm birth is the leading cause of death for children under five, 40 percent of mortality under five is newborn deaths and they occur within the first month of life (International Confederation of Midwives, 2013; United Nations, 2013; WHO, 2003).

Kenya

Kenya is a country on the east coast of the African continent with a population close to 43 million people and a median age of 19 years (Gapminder, 2014). It is the most advanced and major economy in eastern Africa but the economy is unevenly distributed and is considered a so called low human development country and has position 145 out of 186 on the Human Development Index (HDI) (United Nations Development Programme, 2013a). This index is a combined statistic of income, education and life expectancy.

Around 75 percent of Kenyans work in the underdeveloped agricultural sector and 38 percent of the people live in absolute poverty. A substantial part of the population is dependent on food aid (United Nations Development Programme, 2013b).

According to the Kenyan National Bureau of Statistics (2013), the health workforce has almost doubled from 2009 to 2012 and there are 167 nurses (including enrolled nurses) and 19 physicians per 100 000 population. As these figures include healthcare staff that have died or left the profession, the total number of healthcare professionals in service is lower (Kenya National Bureau of Statistics, 2013). Approximately three quarters of all healthcare services in Kenya are provided by health centers, community clinics and dispensaries (WBTi, 2012).

Gender inequality

To measure gender inequality a new tool called the gender inequality index (GII) was introduced in 2010. Kenya has position 130 out of 186 with an index of 0.608 in comparison to Sweden who has position 2 with an index of 0.055 (United Nations Development Programme, 2013a). This index is meant to capture the loss of achievement in a country due to gender inequality and uses labor market participation, empowerment and reproductive rights to do so. Within reproductive rights two variables are included: maternal mortality and adolescent pregnancy rate. It is estimated that in a country where women have access to antenatal care, professional birth attendants, birth control and where teenage pregnancies are low, women have a higher status and influence in society. Further, the most important factor for a child's survival is the mothers' educational level, more important than household income. In Kenya approximately twenty-five percent of the female and fifty-two percent of the male population have at least secondary education (United Nations Development Programme, 2013a).

Maternity, women's and infants' health risks in Kenya

The average age at first marriage for a Kenyan woman is 21 years and the fertility rate in Kenya is 4.5 children per woman. Maternal mortality rate is 360/ 100,000, child mortality 0-5 years 73/1000 born and newborn deaths account for 33/1000 (Gapminder, 2014). Forty-three percent of all deliveries take place in health facilities and the rest take place at home (WBTi, 2012).

In Kenya, birth asphyxia and trauma at birth, neonatal infections and other conditions as well as maternal conditions are among the ten leading causes of burden of disease. Leading causes of mortality in children under 5 years of age are diarrhea, pneumonia, malaria, prematurity, asphyxia, HIV/AIDS, injuries, and congenital causes.

Approximately 52 percent of pregnant women take part of antenatal care (ANC) for at least four visits, though this number varies depending on the region as well as the social, economic and educational background of the woman. It is estimated that 17 percent of

all children under five are underweight and 6.2 percent of the adult population is living with HIV/AIDS (Gapminder, 2014; Global Health Observatory, 2014) .

According to the World Breastfeeding Initiative (2012), statistics in 2008/09 show that 58 percent of babies born in health facilities were breastfed within one hour of birth. Rates for exclusive breastfeeding for six months are still low but has improved from 13 percent in 2003 to 32 percent in 2012 (WBTi, 2012; WHO, 2010). Breastfeeding is the norm in Kenya but as figures show, most babies are not exclusively breastfed the first six months and mixed feeding is a common practice with some infants getting their first other foods apart from breast milk as early as 1-2 months of age (WBTi, 2012).

A study from Ghana states that neonatal death in babies given milk- based fluids or solids were fourfold higher than breastfed babies. Further their research concludes that the time of initiation of breastfeeding were of importance; 22 percent of neonatal deaths could be prevented if breastfeeding were initiated within the first hour and 16 percent within the first day (Edmond et al., 2006) .

Baby Friendly Hospital Initiative (BFHI)

The Baby Friendly Hospital Initiative is a global program initiated in 1991 by UNICEF and the World Health Organization. Its mission is to improve maternity services so that they can provide the best care for pregnant women, mothers and newborns at health facilities and by supporting and promoting breastfeeding (WHO & UNICEF, 2009). In section one, part 4 of these guidelines it is stated that in order for the healthcare staff to help the mother to initiate breastfeeding within 30 minutes of birth they should place the baby immediately following birth SSC with the mother for at least one hour (WHO & UNICEF, 2009).

In 2009, 5.7 percent of health facilities in Kenya conducting deliveries and providing maternity care were certified under the BFHI (WBTi, 2012). WHO/UNICEF (2009) declared that over 2 million children's lives could be saved each year if all babies were to be exclusively breastfed for at least 6 months and further breastfed with a complement of solid foods for two years or more.

The Ten Steps to Successful Breastfeeding

The BFHI guidelines have been summarized to be more accessible for clinics providing maternity services and is the minimum global measures for attaining the status of a Baby Friendly Hospital/Clinic.

1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff.
2. Train all healthcare staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breast milk unless *medically* indicated.
7. Practice rooming in - allow mothers and infants to remain together - 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

(WHO & UNICEF, 2009, p. 11)

Skin-to-Skin Contact (SSC)

There are numerous studies made that show how beneficial it is for the baby to be put in skin-to-skin contact (SSC) with the mother as soon as possible after birth. SSC is an effective way to meet the newborns need for warmth, calm, protection from infection, hypothermia and hypoglycemia as well as facilitating the initiation of breastfeeding. There are no known negative effects of SSC (Charpak et al., 2005; Moore, Anderson, Bergman, & Dowswell, 2012).

For the purpose of this research, skin-to-skin contact is when you place the newborn baby skin-to-skin with the mother, in an upright position on the mothers' chest or abdomen directly after birth. The baby should be carefully dried from excess fluid, wear a hat, or something functioning as a hat, have its back covered with a warm towel or blanket and have space to move its head to allow for proper breathing. The baby should have the opportunity to lie skin-to-skin with its mother uninterrupted until it has accomplished breastfeeding and possibly fallen asleep (Moore et al., 2012) .

SSC is usually practiced on full- term healthy infants and it is a practice derived from a technique to care for preterm and low weight infants called Kangaroo mother care (KMC). KMC was developed in low resource settings in Bolivia to care for preterm and low birth weight infants that had very little chances for survival without specialized care in incubators (Charpak et al., 2005). KMC has been an effective way to decrease neonatal mortality and battle severe morbidity in preterm births (Lawn, Mwansa-Kambafwile, Horta, Barros, & Cousens, 2010). Preterm infants cared for with KMC showed more circulatory stability with stable and normal temperature (Karlsson, Heinemann, Sjörs, Hedberg Nykvist, & Ågren, 2012), respiratory rate, heart rate, reduced stress levels, fewer infections and normalized growth as well as improved cognitive development (Charpak et al., 2005). KMC facilitates frequent and exclusive breastfeeding and bonding between mother and infant.

Studies with full- term babies shows that keeping the baby in SSC prevents hypothermia (Christensson et al., 1992) (Byaruhanga, Bergström, & Okonga, 2005; Bystrova et al., 2003; Christensson et al., 1992; Wise, 1998) and hypoglycemia (Csont, Groth, Hopkins, & Guillet, 2014), enhances the metabolic adaptation (Christensson et al., 1992; Ward Platt & Deshpande, 2005), makes the baby cry less (Christensson, Cabrera, Christensson, Uvnäs-Moberg, & Winberg, 1995; Christensson et al., 1992) and promotes early initiation of breastfeeding as well as enhances the duration of breastfeeding (Mikiel-Kostyra, Mazur, & Boltruszko, 2002; Moore et al., 2012).

Already in 1975 Kennell, Trause and Klaus (1975) suggested that early skin-to-skin contact, during the first hours after birth, a period of time sometimes referred to as the sensitive period, is of importance for duration of breastfeeding and maternal attachment. Further, Kennell and McGrath (2005) proposes that SSC facilitates early bonding between the mother and baby. This interaction is also described as a reciprocal exchange of positive feelings, happiness and a sense of wellbeing for mother and child are key concepts (Roller, 2005).

When placing the newborn in uninterrupted SSC with the mother for enough time, it gives the baby an opportunity to allow its biological and natural stages towards breastfeeding (Widström et al., 1988). Widström et al (2011) have identified nine different stages that the baby goes through before finally accomplishing a successful breastfeeding; birth cry, relaxation, awakening, activity, crawling, resting, familiarization, suckling and sleeping . These stages includes certain sets of signs like rooting movements; moving the head from side to side opening the mouth, moving their hands towards the mouth, sticking out their tongue and making cooing sounds (Widström et al., 2011; Widström et al., 1988; Widström & Thingström- Paulsson, 1993) . If close to the nipple, the baby strokes its mouth over the nipple and can also massage the breast with its hands. Keeping the baby in uninterrupted and undisturbed SSC will give the baby time to go through all of these stages as well as allow for the mother/parents to recognize and learn the behavior of their child (Weimers, Gustafsson, & Gustafsson, 2008; Widström et al., 2011; Widström et al., 1988; Widström & Thingström- Paulsson, 1993).

Aside from the above described benefits, there have been a few accidents while practicing SSC in hospitals, and research stresses the importance of surveying mother and child during the first period of SSC, not leaving them alone for even a short period of time and allowing for adequate number of staffing to take care of mother and child (Andres, Garcia, Rimet, Nicaise, & Simeoni, 2011; Crenshaw et al., 2012; Dageville, Pignol, & De Smet, 2008)

In spite of known evidence for the benefits of early SSC, it is not a regular routine practice in many healthcare institutions around the world (Brimdyr et al., 2012; Charpak & Ruiz-Pelaez, 2006; Moore et al., 2012).

STATEMENT OF PROBLEM

According to (Oestergaard et al., 2011), the Millennium Development Goal 4, to reduce child deaths by two-thirds, has shown positive results. However in the case of newborn deaths the progress has been slow and an increasing proportion of child deaths are among neonates. The first 4 weeks of life is the most vulnerable and dangerous period for an infant and approximately 40 percent of all deaths in infants occur during this time. Keeping the newborns clean, warm and properly breastfed are simple and cost-effective strategies to keep them alive. An effective method to keep infants warm and breastfed at an early point in time after birth is to allow the mother and infant immediate and uninterrupted skin-to-skin contact.

During my time as a volunteer nurse at a community clinic in Kenya I assisted in numerous deliveries. I was intrigued by the fact that the newborns were not put in skin-to-skin contact with their mothers immediately after birth since skin-to-skin contact is a well-known evidence-based procedure with, sometimes lifesaving, benefits both for mother and child.

I decided investigate why skin-to-skin contact was not a routine procedure during deliveries and to focus on the theoretical and practical knowledge and experience among the healthcare professionals working at the clinic. I also wanted to investigate the possible barriers and challenges to implementing it in practice.

AIM

To investigate healthcare professionals' theoretical and practical knowledge and experience of skin-to-skin contact as well as perceived barriers and challenges (if any) to practicing it.

METHOD

"Health itself being a goal of human society, research on the health of communities nearly always has a practical aim, no matter what theory of knowledge it is based on."
(Kiefer, 2006)

The design for this research is condensed ethnography that according to Donovan (2006) can be an excellent tool to get an understanding of how healthcare is organized as well as studying professional groups. Due to limited time and financial resources (as student conducting the research) the ethnography was conducted over a shorter period of time than usually. Before the time of the study, the investigator had worked as a volunteer nurse at the clinic on two occasions for a total of 8 weeks. According to Kiefer (2006) one way for students to learn participant observation can be to work as a volunteer in a community. Participant observation is a method where the researcher takes part in the setting the researcher wishes to investigate in order to understand the setting as a whole. The ideal setting for participant observation is when the researcher, as an equal, lives in the community being studied eating together, living in the same type of housing, wearing the same clothes, take part in work, socializing, as well as shares, if customary, her or his recourses such as knowledge, skills, food etc. (Kiefer, 2006; Stringer, 1996). The identity of the researcher is known to the community and participants and the researcher can ask for clarification of what is observed as well as discuss with the participants on what is interpreted (Donovan, 2006).

Setting

The setting is a Community Clinic located in Kwale County, a region south of Mombasa, an area located mostly inland but also has a coastline with thriving tourism. It has a population of around 500,000 which subsists on farming and fishing. Kwale County is the second poorest region in Kenya with a high level of illiteracy. The population are bilingual in a bantu language called Digo and Swahili, with only those educated population speaking English (Adhock, 2010). Polygamy is allowed and

between 15 and 23 percent of all women in this region live in polygamous relationships (Kenya National Bureau of Statistics, 2010).

The Community Clinic is privately funded and offers basic health care at low cost. For those who cannot afford paying the fees the cost is waived. Apart from basic health care, the clinic offers laboratory services, HIV and tuberculosis care and consultations, immunizations of children, antenatal- and postnatal care as well as deliveries. The clinic also provides a small dispensary. The total number of patients seeking care at the clinic has varied between the highest numbers of 17634 in 2010 to the lowest number 9330 in 2011. The numbers of children under five seeking treatment at the clinic has steadily gone down. This is mostly due to a decrease of malaria victims, an effect of information on how to protect oneself against malaria and distribution of mosquito nets.

Most women have traditionally preferred a so- called traditional birth attendant (TBA) during delivery and prefer not to attend antenatal or postnatal care. After a successful collaboration between the clinic and local TBAs the number of women who come to the clinic for antenatal care and deliveries has increased drastically; antenatal care has increased from 675 in 2010 to 1122 in 2011, and live births from 42 to 263 the same years.

Women in labor usually arrived together with the father of the baby to be born and/or other, mostly female, relatives. The clinic was renowned for welcoming the woman company in the delivery room, but women usually went through the deliver alone.

The clinic had in 2012 one delivery room with two delivery couches separated with a curtain. The bathroom with showers, reserved for mothers, was across a hallway and the postnatal ward was mixed with other, mostly female and children patients.

The mothers rarely ate or drank during labor. There was no pain-relief apart from massage offered during deliveries. Oxytocin was available and often used during final stages of labor. If a complication arose, the nearest hospital with access to blood, operation theatre and neonatal care was about 15 minutes away by the clinics

ambulance. Oro-nasopharyngeal suction was quite often performed on newborns and if they had problems breathing, oxygen was available for administration.

Immediately after delivery the umbilical cord was clamped and cut, the baby dried from fluids, wrapped in two kangas and put to the side or in the arms of an assistants or relative, while the registered nurse continued taking care of the mother.

During my time at the clinic I rarely observed any serious complications during births, and those who were at risk or had any complications were referred to nearest hospital.

Data collection

Data was collected by participant observation and semi-structured interviews with healthcare professionals at a community clinic that perform deliveries. I chose to do semi-structured interviews because I wanted to ask specific questions as well as leave space for my informants to answer more freely than if I had chosen only structured interview questions. Even though more structured questions allow for more comparability, semi- structured questions allow for the informants to speak their own language and discuss issues within the topic that are meaningful to them. The possibility of discovering new and important factors not thought of by the researcher is also more likely with a less structured design. Field notes are the researchers written accounts of what was observed and experienced during the everyday life at the clinic. Field notes complement the data in a more holistic way than only using interviews (Hesse-Biber & Leavy, 2011).

Semi-structured interviews were done with healthcare professionals; six registered nurses and one clinical officer. The inclusion criteria for participants were that they were to have adequate theoretical as well as clinical training in the area of labor and delivery. There were in total seven healthcare professionals that fitted the inclusion criteria. They were all asked to participate and all accepted.

Interviews investigated theoretical and practical knowledge of skin- to- skin contact as well as possible challenges and barriers in implementing the practice in this particular

community clinic. Interviews were made in a private and quiet area at the clinic. Participant observations were made by the researcher working alongside with the health care professionals at the clinic mostly in areas concerning midwifery such as performing deliveries, antenatal and postnatal care checkups as well as immunization of small children.

Participants

To meet the inclusion criteria, the participants had to have a nursing certificate or diploma, be a clinical officer or a doctor. During the period I conducted my research there were in total six nurses at the clinic with diplomas or certificates in nursing as well as one clinical officer. In Kenya, a nurse has 3-3,5 years of theoretical and practical training of which 9 months to a year is reserved for obstetrical and gynecological practical training. They must observe 20 deliveries and conduct 20 deliveries on their own as well as assist at a number of cesarean sections and complicated births such as breech and twin births. Apart from deliveries they also practice in antenatal- and postnatal wards. A clinical officer works under doctors and has three years of theoretical education and one year of practical training of which one year is in obstetrics and gynecology.

Five males and two females were interviewed. They varied in age (23-41 years of age), home region and educational institutions in Kenya and most informants were quite newly- graduated registered nurses.

Ethical considerations

When doing field work it is of ethical importance to be honest about who you are, what you do and for what reason. It is also important to be open for what purpose you do the research. Before conducting the interviews I informed the chief executive officer (CEO) at the clinic about my project and asked for permission to do the interviews. As I was to interview and observe healthcare professionals and not patients, even though there were patients in the field, they were not in focus so no further ethical permission was needed. After getting the permission from the CEO I invited all the staff at the clinic to a

meeting to inform them about my project. During the meeting I introduced myself and my project, what kind of inclusion criteria I had for participation and informed them that it was voluntary to participate. An informed consent form was also presented and explained. I explained that I would audio record the interviews, that no one but the researcher would hear the interviews, that participation was confidential and no sensitive information would be shared or presented in the finished paper.

Before each interview I asked for informed consent and permission to audio record the interview.

I have chosen to write my paper in English in order to allow for the participants to be able to understand and take part in the research process and results.

The researcher, who did not have a midwifery degree during the research nor had a license to practice midwifery or nursing in Kenya, never conducted any deliveries or performed any other tasks reserved for licensed personnel by herself and always had a registered and licensed Kenyan colleague by her side during any kind of procedures.

Analysis

The interviews have been transcribed and generated forty-two pages of text. They were organized and analyzed by qualitative context analysis. Meaning units have been picked out from the different texts and transformed into condensed meaning units. These have been coded and categorized (Graneheim & Lundman, 2004). After further analysis, those categories that had similar meanings were combined so that they finally formed five categories. Categories were then compared and complemented with field notes to get a deeper and wider meaning. Interviews provide the research with emic data by getting a perspective through the eyes and world view of the participant. When the researcher is trying to interpret or make sense of certain proceedings an etic perspective is being formed which is the scholars perception of the participants experiences (Donovan, 2006).

FINDINGS

Five main categories emerged from the interviews; theoretical knowledge, practical experience, healthcare professionals attitude towards SSC, maternal attitude towards SSC and limited time due to high workload. Those categories will be described below and complemented with field notes done by the researcher for a deeper understanding and meaning.

Categories

Theoretical knowledge

Theoretical knowledge about skin-to-skin contact varied among participants and included factors like bonding, prevention of hypothermia, early initiation of breastfeeding as well as a way to get the milk to flow. A few of the participants mentioned hypoglycemia including that SSC stimulates the mothers' uterus to contract which might result in less bleeding. Some also stated protection against infections as a benefit of SSC due to the babies' contact with the mothers' naked skin and its normal bacterial flora.

"Bonding between mother and child", was the one concept that all of the participants on different levels mentioned as a result of SSC.

"Skin- to- skin, I think is a good technique because it gives the mother and child an opportunity to create more bonding, it creates more bonding between the mother and child."

Some of the participants talked about the first smell the baby can feel when she/he comes out, that particular smell of the mother that the baby will recognize even if separated from the mother. This particular smell and contact will create an attachment

that will develop stronger and last for a long time. One participant spoke specifically about SSC as promoting the growth of character development in the baby.

“The first time being out and the first person to meet so that will also enhance the growth of character for the baby. That is the ideal character development. The first time being out and the first person to meet so that will also enhance the growth of character for the baby. That is the ideal character development.”

Prevention of hypothermia in the baby, and provision of warmth from the mothers' skin, were also recurrent concepts.

“You put the baby so it feels the heat of the mothers' skin to feel warm and comfortable so chances of hypothermia is ruled out.”

However, there were also some contradictions regarding some of the positive effects of SSC. Hypothermia was also mentioned as a negative effect of SSC, when the baby was left too long SSC with the mother without being taken away, dried and dressed properly before putting the baby back on the mothers' abdomen.

“Because if the baby lies here for a lot of time, along duration here on top of here it is very easy for the baby to get a lot of coldness because hypothermia in babies comes for around 5 minutes or so after delivery, if that baby is not well kept warm it can start having hypothermia”.

Field observations support awareness of the risk of neonatal hypothermia and the staff was always careful about getting the newborn dry and dressed as quickly as possible after birth. But, even though the interviews show that there is theoretical knowledge about the benefits of preventing hypothermia by placing the newborn SSC with the mother I never saw it in the practice. The babies were either left on a bed by itself due to lack of baby cots, or left in the care of a relative until the mother had taken a shower. Taking the newborns temperature was not a part of routines.

Practical experience

One of the participants had experienced a form of SSC during practical training and none had experienced SSC after graduation apart from a few of the participants who had experienced SSC working together with the researcher. A few participants referred to SSC as Kangaroo care. The one participant who had seen SSC during practical training had seen it as a routine practiced during the few minutes it took to clamp and cut the umbilical cord. As soon as the umbilical cord was cut the baby was given to an assistant to be appropriately dried and then dressed. The same participant explained that during breastfeeding the mothers were encouraged to place the baby abdomen to abdomen, naked skin-to-skin, for comfort and warmth.

“Then you are supposed to teach her how to position the breast when she is breastfeeding and how to hold the baby. And the abdomen of the baby should be in contact with the mothers’ abdomen for warmth and you don’t strain; the mother should be very much comfortable breastfeeding...”

Many of the participants expressed the issue of the gap between certain theory learnt in school with what they actually experienced and learnt in practice. None of participants had during their practical training or clinical practice, apart from those working with the researcher, seen SSC where the baby was placed naked on the mothers’ naked chest with a warm towel or blanket for a period of time until a first successful breastfeeding has been established.

“You see, when you practice in the hospital how the nurses as soon as the baby is out take it to the weighing machine and after that wrap the baby so this is what you see and learn! Not seeing the skin- to- skin being practiced, so this is how we are being taught and that is how we now practice.”

Some of the participants described the routines around deliveries being done during their practical training at different hospitals, and those routines were almost identical with what I observed at the clinic, namely clamping and cutting the umbilical cord

within a minute or so after delivery, quickly drying the baby and handing it to the assistant to further dry, weigh and wrap the baby in two kangas. If there was no assistance, the nurse had to do these steps her/himself, put the baby aside and quickly get back to the mother to administer oxytocin intramuscularly and then continue with delivering the placenta, make assessment of rifts and/or cuts, and if needed do the suturing.

A few participants revealed negative practical experiences regarding the delay of initiation of breastfeeding when separating the baby from the mother straight after birth, something that was of great concern to them as they all seemed to have been taught in theory of the importance of initiation of breastfeeding within 30 minutes after delivery. Some also had experienced positive effects on the baby's alertness when putting the baby in SSC straight after birth.

"Sometimes I have noticed that breastfeeding has not been established after 3-4 hours and that made me really worried. When you just place the baby there [by the breast, researchers' note] it just sleeps. But if you place the baby there immediately the baby remains awake."

Breastfeeding was also talked about as something that was in the mothers head and issues regarding breastfeeding could be changed if only the mother changed her attitude. Field notes during observations support the concerns about and focus around a well-functioning and exclusive breastfeeding for at least 6 months. Somehow breastfeeding was often talked about as something mechanical, to some degree psychological and something the mother was to be instructed to do in terms of how to hold the baby and the importance of changing to the other breast etcetera. During my observations I assisted some of the nurses during deliveries and we decided to try to introduce SSC to some mothers. I noticed how my colleagues seemed quite surprised on the positive effects on the babies' alertness and how quickly some of the babies started rooting movements in search for the mothers' nipple.

Healthcare professionals attitude towards SSC

Negative attitudes among healthcare professionals towards implementing SSC as a routine were also acknowledged by some of the participants.

“With the staff yeah, it might also be an issue with the staff because in medicine things always keep on changing. If one staff has not been trained in skin to skin care they might find implementing, might not realize the benefits.”

Lack of practical experience was mentioned as a possible reason for healthcare professionals' negative attitude and lack of belief in SSC.

Maternal attitude towards SSC

Regarding the mothers' attitude towards SSC, the opinions and thoughts were divided. Some participants thought it was not an issue at all for the mothers, and some participants stated as one of the biggest challenges towards being able to implement SSC in the practice. Negative attitudes towards SSC were thought to be among primary gravida in particular, mothers who had no experience with having such a small baby so close immediately after birth.

“I don't think there is any negative effects of skin to skin unless maybe on attitude of some mothers on having that tiny baby directly in touch, some think...especially those who are first time, those with primary gravida may not be in a position really to accept the issue as early as possible, unless give the importance in health education to the mother.”

Another participant expressed the mothers experience with having her baby skin-to-skin as a motivation for the mother.

“She can now see the baby and taste the fruits from her endeavor, she can now be happy and it encourages the mother psychologically”.

Educating mothers- to- be about SSC during ANC were something most participants considered implementing as a way to inform the mothers about the benefits of it as well as that it was to be done during delivery.

“But as long as we have been educating them and told them the benefits this is something they will be expecting when we start giving them the babies to stay with them and get that skin body contact, then they will be able to understand prior before it happens...”

According to my observations, most women who got SSC with their newborn baby straight after birth had no negative attitude to this procedure. On the contrary, I perceived they found it to be a positive experience, especially among primary gravidas who had nothing else to compare with.

Limited time due to high workload and inadequate staffing

The participants expressed that they thought it would be difficulty to make time to practice safe skin-to skin care due to limited time to spend with the mother and baby after delivery because of their high workload and inadequate staffing.

“I think it is because people are trying to hurry up with the work, to finish up with what they are doing so as to tackle other issues because of workload. The same person is supposed to attend the mother as well as to other patients. That is the only reason I may say to why the practice is not practiced all through.”

Most participants talked about the fact that they often had to make sure to finish up in the delivery room in order to be prepared for new mothers, or to take care of other clients in the clinic. The time factor and high workload was something I also noticed in my observations. During night time there was often only one registered nurse on duty together with a nurse assistant. This factor in combination with sometimes being the only healthcare professional on duty and/or the amount of other clients needing attention and care, made the participants not able to do more than absolutely necessary during and after a delivery. The cleaning done after each delivery was meticulous so as

not to risk that any kind of transmission transmittable diseases was possible. The registered nurses were also responsible for cleaning and packing all instruments being packed for sterilization; a task sometimes delegated to an assistant.

DISCUSSION

The findings show that all of the participants had some theoretical knowledge about skin-to-skin care but only a few of the participants had seen it in practice. Most of the participants were aware of the positive effects of skin-to-skin care but reported high workload, lack of time, space and adequate number of health care staff as reasons for not being able to implement it in practice. Disbelief in the benefits of SSC and negative attitudes and inexperience in healthcare professionals and mothers' were mentioned as barriers to implement SSC as a routine practice in the clinic. Theoretical knowledge about SSC among participants in the study was around bonding, initiation of breastfeeding, hypothermia, hypoglycemia, infection and the contraction of mothers' uterus.

One of the positive effects of SSC mentioned by the informants was bonding between mother and child. Bonding was described in many different ways such as the mother owning the baby, and the baby owning the mother, and so forth. Emotional concepts like bonding can be difficult to investigate and often described as the rise of immediate love between mother and child (Klaus, Kennell, & Klaus, 1995).

Dumas et al (2013) show that mothers who had experienced SSC directly after birth handled her infant more carefully during breastfeeding in comparisons with mothers who had not had SSC with their baby. During SSC the baby, while going through the 9 stages towards breastfeeding, is using mouth and hands to stimulate the mothers' breast and nipple which triggers the production of the hormone oxytocin in the mother (Mathiessen, Ransjö-Arvidson, Nissen, & Uvnäs-Moberg, 2001). Further, this release of oxytocin can be of importance for the interaction between mother and newborn, milk ejection and uterine contraction (Mathiessen et al., 2001).

One informant expressed that SSC, when the mother can see and feel her baby, can be a motivation for the mother for all her endeavors. According to the informants, mothers' negative attitudes toward SSC were due to inexperience and feelings of insecurity holding her newborn child. Some informants stated that by providing information about SSC during antenatal educational mothers' attitude could be changed. Dalbye et al (2011) show that skin-to-skin care can trigger a "positive spiral" where the mother, by providing her child the best possible care, gets an instant positive feedback from her child's response which would encourage her to continue the practice. In a study by Darmstadt et al (2006) from a rural setting in India, findings show that one reason for mothers to accept SSC is the sense of maternal empowerment the practice gave the mothers. This would suggest that it is the physical experience that actually is the trigger to change the attitude, more than education and information. Further, Darmstadt et al (2006) came to the conclusion that healthcare workers' attitude towards SSC was of importance and the attitude changed after being convinced of the benefits as well as feeling rewarded by the acquisition of new knowledge and being able to educate the mothers about SSC.

Informants also suggested that SSC would imply early initiation of breastfeeding and a time limit of initiating breastfeeding within 30 minutes after delivery was often mentioned. In spite of the fact that most of the participants were focused on the importance of initiation of breastfeeding within 30 minutes after delivery, no one was able to describe how it was going to be possible or were able to discuss the functions of successful breastfeeding in more detail. Studies show that early initiation can lower infant mortality but is often delayed beyond the first hour after birth in low income countries (Edmond et al., 2006; Huffman, Zehner, & Victora, 2001; Moore et al., 2012). As earlier stated, exclusive breastfeeding for at least six months and followed by breastfeeding complemented with solid foods for 2 years or more could save millions of children's lives each year and is considered the "leading preventive child survival intervention" (WHO & UNICEF, 2009). Early initiation of breastfeeding can also effect the duration of breastfeeding and mothers who had SSC with their newborn immediately after delivery until the newborn had breastfed successfully, had a tendency to breastfeed for a longer period (Moore & Anderson, 2007; Moore et al., 2012;

Phillips, 2013). Therefore it is a clear link between SSC and successful, long-term breastfeeding. In Kenya only 32 percent of all infants are exclusively breastfed the first six months (WHO, 2010). Participants' comments around breastfeeding were more about the fact that the baby got easier access to the breast/nipple during SSC and how SSC would give the baby "a chance to reach the nipple and to start suckling".

The fact that the routines after the delivery might hinder the natural steps for the baby to start breastfeeding early were not discussed in the interviews. According to Crenshaw et al. (2012) the 30 minute time limit is a misunderstanding of Step 4 of the BFHI, and it might hinder more than result in successful breastfeeding. By not allowing the newborn to take its time and by not being aware and/or sensitive to the newborns nine instinctive stages towards breastfeeding during skin-to-skin contact, it is difficult for health care professionals to be the important support towards successful breastfeeding to the new mother and the baby that they wish to be (Crenshaw et al., 2012). When the baby is placed in continuous and uninterrupted SSC with the mother, the baby gets an opportunity to go through all the nine stages towards breastfeeding (Widström et al., 2011) and recent research shows that uninterrupted skin-to-skin contact is the best, if not only, practice to promote early initiation of breastfeeding (Crenshaw et al., 2012; Moore & Anderson, 2007; Moore et al., 2012; Widström et al., 2011).

Dumas et al (2013) also came to the conclusion that mothers who had been separated from their babies after birth were rougher with their baby when trying to make the baby latch on as well as the baby often being less awake during the first breastfeeding. The issue of the baby not being awake when it was time for the mother to start breastfeeding the baby, was something the participants had noted and reported as an issue of concern. Often they reported the baby being put to the side and the mother claiming the baby had fallen asleep and there was no milk. Participants often thought the mothers were ignorant not knowing that if they put the baby to the breast, the milk would flow. Others reported the baby "had lost the courage to breastfeed" during the time it had been separated from the mother during the so called "sensitive period", the first 2 hours after birth, something that is supported by studies where a baby not put in SSC is less alert and awake than a baby put in SSC (Moore & Anderson, 2007; Moore et al., 2012).

Informants knew that SSC prevents hypothermia in the infant. Hypothermia and consequences of hypothermia, is one of the leading causes of early neonatal mortality in low income countries (Byaruhanga et al., 2005; Huffman et al., 2001; Vesel et al., 2013). Studies made in different parts of low-resource settings show that up to 85 percent of all newborns had a body temperature below accepted levels in the 2 hours following delivery and findings indicate that knowledge and practice around thermal care of newborns is a global problem (Darmstadt, Kumar, Yadav, Singh, Mohanty, et al., 2006). When the newborn infant cries for a longer period of time which often is the case when separated from its mother it is, within research, a well-known fact that the risk of hypothermia as well as hypoglycemia rises (Bystrova et al., 2003; Christensson et al., 1995; Christensson et al., 1992).

Many studies show how SSC is the most effective way to keep the newborn warm after birth, not only for prevention, but also to treat hypothermia (Bystrova et al., 2003; Moore et al., 2012; Widström et al., 2011). Another benefit of SSC is that the risk of hyperthermia is limited due to the fact that when the newborn has reached its required temperature of 37 degrees Celsius it loses heat to the mother (Wise, 1998). Prevention of hypothermia and as a source for warmth was some of the most frequent answers around the benefits of SSC. In practice, the routines around the baby after birth also support the knowledge about the importance of keeping the baby warm even though the practical routines did not include SSC (Moore et al., 2012). Just like in so many other hospitals and clinics around the world (Bystrova et al., 2007), the baby was carefully dried, swaddled and put to the side even if it was not in a cot with heat due to a lack of financial and material resources.

Informants also knew that early initiation of breastfeeding counteract hypoglycemia in the infant. The most common risks for hypoglycemia in neonates are preterm birth, term or late preterm infants large for gestational age (LGA) or babies small for gestational age (SGA) as well as infants born to diabetic mothers (Csont et al., 2014). Hypoglycemia in breastfed, warm, calm and full- term infants is uncommon and, if kept in SSC their metabolic adaptation is a much smoother transition (Christensson et al.,

1992; Ward Platt & Deshpande, 2005). However, if the neonate does not manage to stabilize the glucose level, hypoglycemia can be a life-threatening concern and breast milk within one hour after delivery is a recommended preventive measurement (Csont et al., 2014; Ward Platt & Deshpande, 2005). Most women at the clinic are not screened for diabetes during pregnancy, nor is the gestational week always known for sure when a woman comes to the clinic to deliver. Neither are tools to measure blood glucose on infants available, or the blood glucose machine available at the clinic is not being used in the delivery/postnatal ward.

Knowledge about benefits of SSC for the mother was scarce and a few informants mentioned that SSC may promote the mother's uterus to contract and prevent excessive bleeding in the postpartum period. This is supported in studies where findings suggest that SSC can reduce the time of delivery of placenta and thereby reduce the risk of excessive bleeding (Marín et al., 2009; Moore et al., 2012).

One of the most important reasons for not practicing SSC mentioned by the informants was limited time due to high workload. Inadequate staffing are the reality for participants interviewed in the study, as well as limited resources to provide suitable equipment such as delivery beds, where mother and baby can lay comfortable and safe. Guidelines, according to Crenshaw et al (2012) in a study from the US, for safe staffing during vaginal as well as cesarean deliveries, are one healthcare professional for the mother and one for the baby. Further the article states that "following these guidelines would enhance implementation of optimal skin-to-skin care after vaginal birth and cesarean surgery" (Crenshaw et al., 2012). With the situation in Kenya where there are less than 167 nurses and 19 physicians per 100,000 population (Kenya National Bureau of Statistics, 2013), there are obvious limitations on the possibilities to provide this kind of optimal skin-to-skin care.

SSC is sometimes confused with KMC, and sometimes I got the impression that the participants meant KMC while talking about SSC. There are few studies made about SSC in low-income countries but research about KMC is abundant, so I will take the liberty to use results from a study by Charpak and Ruiz-Pealez (2006) regarding the

resistance to implementing KMC in practice in low-income countries. The original Kangaroo Mother Care (KMC) developed from a need to keep preterm infants protected and warm in a low-resource setting and to put the infants in SSC is often described as a simple and cost effective technique. Charpak and Ruiz-Pelaez (2006) shows that there is a prevailing idea of KMC as sub-standard care because it is considered low cost and mostly used in low-income countries. Another factor was the idea among healthcare workers that it would add to an already high workload. Both issues could be addressed with experience, education, facts and evidence that the practice is safe, beneficial to both mother and child as well increasingly used in low-income countries as well. With educated and trained mothers it can even be a relief for the staff (Charpak & Ruiz-Pelaez, 2006).

Low-income countries are not one nation and as Darmstadt et al (2006) presents in their study, solutions needs to be addressed in a local context for them to be adapted by the community and healthcare workers locally.

Limitations and other methodological concerns

Doing this kind of research can be quite a challenge when you have limited experience and training in doing interviews and participant observations. To be able to discuss what is observed as well as what is said or, even more importantly, what is not said in interviews can be of great importance. However, the benefit of being only one researcher is that it might be easier to fit in and to be a part of the community you are studying. As I have spent time working as a volunteer during three occasions I believe I was somewhat considered a colleague and equal in many ways. On the other hand, the willingness to fit in can also put you in a position when you do not perform for example interviews to the professional level that you would have needed in order to get as much information possible. Interviews in this particular study ended up having a quite conversational tone, which can be good but, unfortunately, they ended up a bit thin and certain issues were not dealt with thoroughly. My pre-understanding of the subject also gave me a want to educate my participants and parts of the interviews were more like I was interviewing myself. This was not discovered until I had left the setting and I had returned home and I believe it may have been avoided with more open ended questions

and more patience. To control one's eagerness to convince someone that what you know is the way to go is difficult and to use your pre-understanding as a tool and not a barrier. It is an important lesson learned.

My pre-understanding and strong belief in the concept of skin-to-skin care could also have given the data a certain bias, but this is something all researchers need to keep in mind as we all have a certain amount of pre-understanding to be able to conduct the research we do at all.

However, the weaknesses can also be what gave the research validity in the sense that me being there alone and being able to observe and conduct the interviews like a colleague, could have been what gave me sincere answers and opportunity to make observations of the way situations really were.

Further research

I was not able to investigate the mothers' feelings and experiences of SSC. Few studies are made in low-income countries about SSC, especially around mothers in low resource settings, their attitudes and feelings about child birth and the care they get at the healthcare institutions. I was able to observe and interpret by looking at how I perceived how they felt but I could not talk to the patients directly as I did not have ethical approval to conduct research on patients. Neither do I speak or understand the local language and many of the mothers did not speak English well enough for us to be able to communicate without an interpreter. A long term research project on the effects of skin-to-skin care in these types of environments would also be of interest and value.

Conclusion and implications

Uninterrupted and immediate skin-to-skin contact between mother and newborn after birth is a safe and cost-effective practice to keep the baby clean, warm and properly breastfed. Despite of well-known benefits, skin-to-skin contact is not being a part of delivery ward routines in many parts of the world. This study indicates that there is a need for deeper theoretical knowledge and practical experience with skin-to-skin

contact among healthcare professionals in order for the practice to be implemented as routine in the clinic.

By learning about challenges to implement this sometimes lifesaving practice it will allow many mothers and babies to enjoy this first sensitive period in life together to the fullest.

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APPENDIX 1

Form of consent

My name is Sara Törnquist and I am a midwifery student at the College University of Borås (hur gör jag här när jag bytt universitet?), Sweden. I am in the process of gathering data for my final paper. My subject is “skin-to-skin care”, a form of care where you put the baby skin to skin to the mother directly after birth, and I am interested in knowing what you know about this concept.

To gather data I will do individual interviews with registered nurses who perform deliveries in a community clinic in the coastal province of Kenya.

The interviews are confidential and will not be shared with anyone not involved in the project. The interviews will be saved in the researcher’s computer with a code to unlock only known to the researcher.

If any participant would like to withdraw from this project you are welcome to do so without any consequences to the participants.

If you have any questions regarding the project or would like to take part of the result you are more than welcome to contact the researcher via email:

saratornquist1@gmail.com

Best regards,

Sara

